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(54) Implementing universal serial bus support with a minimum of system RAM

(57) A computer system that implements communication support with a minimum amount of main memory. The computer system provides a Basic Input/Output System (BIOS) for execution in Random Access Memory (RAM). Included in the BIOS is the communication initialization and runtime code. Upon initialization, the communication initialization code is executed, configuring and initializing communication devices, including a Universal Serial Bus (USB) device. After the initialization, the runtime communication code is moved to a secure memory, such as System Management Mode (SMM) memory. The runtime communication code is executed in response to an interrupt to the secure memory. If the secure memory is SMM memory, then a SMI will trigger the execution of the communication code. The main memory is not accessed to execute the runtime communication code.

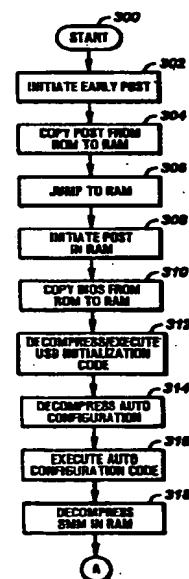


FIG. 3A

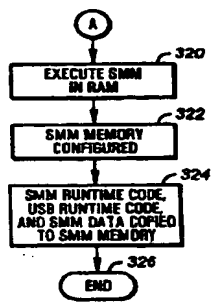


FIG. 3B



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EUROPEAN SEARCH REPORT

Application Number
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TECHNICAL FIELDS SEARCHED (Int.Cl.6)					
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The present search report has been drawn up for all claims					
Place of search THE HAGUE		Date of completion of the search 28 February 2001	Examiner Wiltink, J		
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure P: intermediate document</p> <p>T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document cited for other reasons &: member of the same patent family, corresponding document</p>					

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